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WOUNDS OF THE HEART.

FROM LECTURES BY G. J. GUTHRIE, ESQ., F.R.S.

WOUNDS OF THE HEART are for the most part immediately fatal. Many persons have, however, been known to live for hours, nay days, and even weeks, with wounds which could scarcely be otherwise than destructive; and several cases are recorded in which the cicatrices discovered after death, in persons known to have been wounded in the vicinity of the heart, have shown that even severe wounds of that most important organ are not necessarily fatal. As our knowledge of the nature of the injury inflicted can never be distinct, it follows that every wound should be considered as curable until it is unfortunately proved to be the contrary.

Auscultatiom and *percussion*, and principally auscultation of the whole præcordial region, have afforded means of judging of injuries of the heart which were not formerly known. A vertical line, coinciding with the left margin of the sternum, has about one third of the heart, consisting of the upper portion of the right ventricle, and the whole of the left, on the left. The apex of the heart beats between the cartilages of the fifth and sixth left ribs, at a point about two inches below the nipple, and an inch on its external side; or, if one leg of a compass be fixed at a point midway between the junction of the cartilage of the fifth rib on the left side, with the rib and the sternum, and a circle of two inches in diameter be drawn around, it will define as nearly as possible the space of the præcordial region occupied by the heart—whilst uncovered, except by the pericardium and some loose cellular texture. In the rest of the præcordial region it is covered and separated from the walls of the chest by the intervening lung.

If the chest of the dead subject be transfixed with long needles, it will be found that the centre of the first bone of the sternum corresponds with the lower edge of the left subclavian vein, and to the arch of the aorta crossing the trachea; the centre of the second bone to the upper edge of the appendix of the right ventricle; and the centre of the third bone corresponds to the right side of the right auricle; the right ventricle being lower down. A needle penetrating the chest at the costal extremity of the fifth rib, close to the upper edge of its carti-

lage, will touch the septum of the ventricle. The apex of the heart is an inch and a half below this, and inclined to the left side.

The semilunar valves of the pulmonary artery correspond to a spot a little below the centre of the third bone of the sternum. The aortic valves are a few lines below and behind the pulmonary. The mitral valves are a little lower, and still more deeply seated. The pulmonary artery, after touching the sternum, inclines to the left, and is found close to the sternum, between the second and third ribs. The aorta ascends to the first bone, and crosses it to form the arch.

One third of the heart, consisting of the upper part of the right ventricle and of the whole of the right auricle, is beneath the sternum; the remainder of the right, with the left ventricle and auricle, are to the left side of that bone.

On applying the ear to the præcordial region, the patient being in the erect position, two sounds are distinguishable in a healthy heart—one duller and more prolonged, the other clearer and shorter; between these there is scarcely an appreciable interval. The period of repose is sufficiently marked before the first or duller sound returns. Of the time thus occupied, one half is filled up by the first or dull sound; one quarter by the second or sharp sound; one quarter by the pause or period of repose.

Twenty-nine theories have been proposed, each accounting for the sounds of the heart. The theory of Dr. Billing appears to prevail at present, which supposes that the sounds thus heard "are caused by the valves, which, being membranous, each time they resist the reflux of the blood, are thrown into a state of sudden tension, which produces sound."

The impulse of the heart, so far as it can be felt by the touch, depends much on the position in which the body is placed. In the erect position it is heard between the fifth and sixth ribs. In the recumbent posture the impulse is almost imperceptible. It is, perhaps, more observable when the body is turned on the right side, but decidedly more so when it is turned on the left. A clearer sound proceeds from a thin, and a duller sound from a thick heart; a sound of greater extent from a large heart, and a sound of less extent from a small one. A more forcible impulse is given by a thick heart, and one more feeble by a thin one; the impulse is conveyed to a longer distance from a small heart.

From a clearer sound we believe in the probability of an attenuated heart, but we argue its certainty from a clearer sound joined with a weaker impulse. A stronger impulse denotes the probability of an hypertrophied heart, but we argue its certainty from a stronger impulse with a diminished sound.

The terms endocardial and exocardial are used to designate the alterations which take place in the sounds of the heart under disease; endocardial when they occur within the heart, and exocardial when they take place upon its surface. The endocardial murmur of disease, or bellows-sound, takes place of, and is substituted in certain cases for, the first or second, or even for both the healthy or normal sounds. The exocardial murmur of disease is heard with the normal sounds, but con-

fusing and overpowering, sometimes overwhelming them by its rubbing or crumpling noise. The natural sounds exist, although rendered imperceptible by the greater distinctness and nearer approach of the unnatural or unhealthy ones.

The heart apart from the pericardium never moves without a sound; the pericardium apart from the heart never gives out one. Under disease the heart gives out the natural sound, diminished, exaggerated, or modified, or, it may be, totally altered. The sounds given out by a diseased pericardium must always be new (there being no old ones), and are described as rubbing, or to-and-fro sounds. The pleura when diseased, being a serous structure, like the inner membrane of the pericardium, gives out less marked, but somewhat similar sounds (the "*frottement*" of the French), in particular stages of the disease.

The alterations in the ordinary sounds constituting the endocardial murmurs of the heart heard under disease, depend principally on the altered state of the endocardium, or membrane lining its cavities; the sounds given off, and called exocardial, on an altered state of the serous membrane of the pericardium, are reflected over the outer surface of the heart. The endocardial or bellows sound, when it accompanies the normal sounds of the heart, may result from any kind of derangement affecting the internal membrane of that organ, particularly rheumatic inflammation, or from any force which may compress its cavities; it may depend on the altered quality of the blood, from anæmia. It should be present after excessive hæmorrhages have greatly reduced the powers of the sufferer. When this murmur or sound occurs after injury in the vicinity of the heart, and is accompanied by fever, it indicates inflammation of the lining membrane, although no local pain, no palpitations, nor irregular movements of the heart should be present.

When a murmur or sound is heard of a different kind, possessing the character of friction, or of surfaces moving backward and forward on each other, or to and fro—this sound is the sign of inflammation of the membrane covering the heart, as well as of that lining the fibrous external tissue of the pericardium. The signs of both external and internal inflammation may be present at the same time, and they frequently are in cases of acute rheumatism.

When the heart is supposed to be wounded, even without much loss of blood, there is fainting, palpitation, irregular movement or total cessation of its action; coldness of the extremities; ghastliness of countenance, succeeded by great anxiety; a sense of anguish; an intermission or cessation of pulse, followed, if the patient should survive, by re-action, which renders it very frequent, and sometimes increases its impulse, whilst the anxiety is increased by pain, sometimes intolerable, referred to the part. These symptoms imply a serious injury, although they may not all be present, and many of them differ in intensity. If the patient should survive, the ordinary sounds of the heart will return, with more or less irregularity, accompanied after a few hours by the endocardial murmur, although something like it may perhaps be observed from the first period of injury. The friction, or attrition sound, indicating the presence of inflammation of the pericardium, may be absent, and will

not be discernible, if a layer of blood is effused into the cavity of that membrane, whilst the natural sounds of the heart are rendered more indistinct as the heart is separated from the walls of the chest by the effusion, which distends the pericardium, and impedes the regular action of, but cannot compress the heart, as an empyema does the lung. If inflammation take place without an effusion of blood, the friction sound will be heard, and will usually continue even after some effusion of serum and of lymph have occurred, as the quantity of serum is rarely sufficient to prevent the effused and attached portions of lymph from rolling against each other.

The presence of a larger quantity of fluid may be more distinctly known by percussion; if it can be borne in cases of injury, the degree and extent of the dulness being the measure of its existence and accumulation. It may extend over a part or the whole of the præcordial region, reaching as high as the second, or even the first rib, beneath the sternum, and even under the cartilage of the ribs of the right side.

That the heart when wounded is capable of recovery by the permanent closure of the wound, in a few rare instances, is indisputable; and it would seem, from a consideration of the different cases which have been recorded, that such recovery takes place in consequence of there being little blood discharged through the wound, or into the cavity of the pericardium, or into that of the pleura. The absence, or the cessation of hæmorrhage, by the contraction of the wound, or the formation of a coagulum, is the first step towards a cure, and it was to one or other of these circumstances that most of those who survived the injury for several days or weeks owed their existence for the time, although they usually died from the effects of inflammation, more of the inner lining and outer covering, than of the substance of the heart itself.

If the wound be inflicted by a musket or pistol-ball, it cannot be closed, although pressure may be made upon it for a time, so as to suppress the external flow of blood. If this should succeed, it is more than probable that the hæmorrhage will continue internally, and that the patient may die after much suffering, principally from oppression, caused by the escape of blood into the cavity of the chest.

If the wound be a stab, the external opening may be accurately closed, and the escape of blood prevented; but as the pressure of the blood in the pericardium is unequal to restrain the action of the heart, blood forced out through the opening fills the cavity of the pleura, and causes suffocation, unless from some accidental circumstance the opening in the heart becomes obstructed and the bleeding ceases.

If all the circumstances be considered, there can be no doubt of the propriety of closing the wound in the first instance, if the flow of blood is excessive and appears likely to endanger life. It seems to be as little doubtful that the wound should be re-opened after a time, if the danger from suffocation be imminent. The relief obtained by the escape of a little blood may be efficacious, whilst it does not necessarily follow, although it is more than probable it will be so, that its place will be occupied by a further extravasation of blood, which will prove fatal. It is a choice of difficulties, and death from hæmorrhage is easier than death from suffocation.

In the case of the Duke de Berri, whose right ventricle was wounded, and who died from loss of blood, Steifensand reprehends Dupuytren for having opened the external wound every two hours to prevent suffocation; but if death were actually impending from the filling of the cavity of the chest being about to cause suffocation, there was nothing to be done but to give relief at all hazards.

When the sufferer has recovered from the imminent danger attendant on the infliction of the injury, and the pericardium is believed to be so full of blood or of serum as to prevent in a great measure the movements of the heart, it has been proposed by the Baron Larrey to open the pericardium by the following operation—equally, as he thinks, applicable in an ordinary case of hydrops pericardii:—

"An oblique incision is to be made from over the edge of the ensiform cartilage, to the united extremities of the cartilages of the seventh and eighth ribs. The cellular tissue being divided with some fibres of the rectus and external oblique muscles, there remain only a portion of the peritonæum, called its false layer, above the pericardium, which can be seen after the division of all intervening cellular tissue, projecting between the first and second digitations of the diaphragm. Into this the bistoury is to be entered, with the precaution of doing it with the edge turned upward, and directed a little from right to left, to avoid the peritonæum. The smallest portion possible of the anterior border of the diaphragm is next to be divided, where it is attached to the inner part of the cartilage of the seventh rib. The internal mammary artery is to the outside. The patient should be placed perpendicularly, and supported on his bed, which inclines the anterior part and base of the pericardium to the fore part of the chest."

Skielderup recommends this operation to be done by trepanning first the sternum, a little below the spot where the cartilage of the fifth rib is united to that bone, at which part the periosteum lining it offers considerable resistance, and should not be divided by the trephine. Below this there is a triangular space formed by the separation of the layers of the mediastinum, free from cellular tissue, and tending a little more to the left than to the right. The apex of this triangle is opposite the fifth rib; its base touches the diaphragm. The bone having been removed, the patient is made to lean forward, when the projection of the pericardium will enable the operator to feel that a quantity of fluid is within, and to open it with safety.

J. Dierking, a stout, muscular man, of the third regiment of German Hussars, was wounded at the battle of Waterloo by a lance, which penetrated the chest between the fifth and sixth ribs, and was withdrawn. He fell from his horse, lost a good deal of blood by the mouth, and some by the wound, and was carried to Brussels without any particular attention being drawn to the injury. His strength not being restored, whilst he suffered from palpitations of the heart, and other uneasy sensations in the chest, he was sent to England to be invalided, and in November, 1815, to York Hospital, Chelsea, in consequence of an attack of pneumonia, of which he died in two days, without attention being particularly drawn to the cicatrix of the wound.

On examining the body I found that the lance, having injured the edge of the cartilage of the rib, passed through the inferior lobe of the left lung, the track being marked by a depressed narrow cicatrix. It then perforated the pericardium under the heart, and sliced a piece of the outer edge of the right ventricle, which being attached below turned over and hung down from the heart to the extent of two inches, when in the fresh state, the part of the ventricle from which it had been sliced being puckered and covered by a serous membrane like the heart itself. The lance then penetrated the central tendon of the diaphragm, making an oval opening, easily admitting the finger, the edges being smooth and well defined. It then entered the liver, on the surface of which there was a small irregular mark or cicatrix. The heart in front was attached to the pericardium by some strong bands, the result of adhesive inflammation, but the general appearance of the serous membrane showed that this had not been either great or extensive. The pericardium was not thickened.

If this man had lived long enough, he might have furnished an instance of hernia of the stomach or intestine into the pericardium.

That the heart when exposed is insensible, or nearly so, to the touch, was known to Galen and to Harvey. Galen is said to have removed a part of the sternum and pericardium, and to have laid his finger on the heart. Harvey did the same on the son of Lord Montgomery, who was wounded in the chest. Prof. J. K. Jung not only introduced needles into the hearts of animals, but also galvanized them without disadvantage, although Admiral Villeneuve is supposed to have died suddenly from running a pin into his heart with a suicidal intention.

That a person may die from the shock of a blow on the heart, need not be doubted, and that they do die when little blood is lost, is admitted. History preserves the fact, that Latour d'Auvergne, who had obtained the honorable title of "Premier Grenadier de France, and Captain of the 46th demi-brigade," fell and died immediately after receiving a wound from a lance at Neustadt, in the month of July, of the sixth year of the Republic, which struck the left ventricle of the heart, near its apex, but did not penetrate its cavity. He was, however, 68 years of age.

In wounds of the heart, all extraneous matters should be removed, if possible, and all inflammatory symptoms should be subdued by general bleeding, by leeches, by calomel, antimony, opium, &c. The chest should be examined daily by auscultation. If the cavity of the pleura should fill with blood, it ought to be evacuated to give a chance for life, and if the pericardium should become permanently distended by fluid, it should be evacuated.

Lacerations and ruptures of the heart have frequently taken place from blows or other serious contusions.

Ollivier, who devoted much time to reading and collecting the observations made by different writers on the injuries of the heart, says, "that of 49 cases of spontaneous rupture of the heart, 34 were of the left ventricle, 8 only of the right, 2 of the left auricle, 3 of the right, and that in 2 cases both ventricles were torn in several places; and that

these results were in an inverse proportion to those which occurred after blows or contusions; the right ventricle being ruptured in 8 out of 11 cases, the left ventricle 3 times; the auricles being also torn in 6 out of these 11 cases; the ruptures not being confined to one spot, but taking place occasionally in several different parts, or even in the same ventricle." In 8 of the cases he had noticed, the heart was ruptured in several places. That a spontaneous rupture may be cured as well as a wound, seems likely from a case reported by Rostan, of a woman who died after fourteen years' suffering with pain about the heart, and was found to have the ventricle ruptured. A cicatrix was observed to the left side of the recent rupture, half an inch in extent in every direction, and in which the new matter was evidently different from the natural structure of the heart.—*London Lancet.*

SOURCE OF VITALITY IN THE TEETH.

RHIZODONTRYPO-NEURHÆMAXIS, AND THE REMOVAL OF THE DENTAL PULP, NOT FOUNDED ON PHYSIOLOGICAL PRINCIPLES, AND THEREFORE IMPRACTICABLE.

[Communicated for the Boston Medical and Surgical Journal.]

In this progressive, practical, and prolific age, it is not surprising, when we consider the long and diligent cultivation which the various arts and sciences have received from so many hands, that by a careful observation, there should be discovered, here and there, an abnormal growth, or parasite, which needs the amputating knife of the "dresser" to more fully insure the perfect and rapid growth of the true scions. It is the duty of every professional man, and of every man in society, whatever his calling or circumstances may be, to do something to add to the knowledge and interest of that department in which he labors; and to examine and investigate such projects and theories as may come before him, before fully subscribing to them. It is not expected that all are to make discoveries or inventions; but all may do something towards *proving* them. From the days of the persecuted "Copernicus, Jenner and Galileo," down through the hosts of false and true, practical and impractical, theorists, even to the days of Perkins with his "tractors," Hahnemann with his working motto, *similia similibus curantur*, Paine with his "light," and Willard and Ericcson with their motive powers, there has been, and there always will be, not a few, who will make it their business to examine and investigate, to see whether the things stated "are so." The world usually attributes merit only to those who succeed; but every one who makes effort, in a good cause, should receive credit, alike with those who are more successful, as *motive* gives character to action.

The microscope has opened, and is still opening, a wide and interesting field of discovery to the anatomist and pathologist; and few are the diseases in which the physician has not been made wiser through its use, thereby better understanding the condition of the diseased subject; and been thus enabled to more accurately apply his therapeutical agencies to the patient's pathological wants. It therefore becomes every member

of the healing art to keep well "posted up," or he will be exposed to the charge of supporting, both by precept and practice, some theory that *was*.

The remarks recently made through this Journal, on the subject of microscopic observation by the profession generally, have much force; and I hope the time is near, when the profession, in the United States, shall take the lead in this department of scientific research.

In the matter of the "new operation" on the teeth, which has already elicited some discussion; I do not wish to be considered as setting myself up as a teacher (as intimated by my friend Dr. Miller), but as an humble learner, seeking for the true light of science as developed by study, and careful and well-tried experiment and observation.

I am happy in stating that Dr. Miller rightly understood me, when he inferred, from a former article, that it was my opinion "that the principle of vitality in a tooth, resides in its central ganglion *only*—that it has no *other* source, and when *that* is cut off it *immediately* loses its vitality, and nature soon makes an effort to remove it." This position I think I am able to sustain by incontrovertible evidence, drawn from the recent investigations of physiologists; though, in so doing, I should be sorry, in my efforts to do science and dental patients justice, to necessarily convince any member of the art, "and among them the ablest of the profession," "of having been engaged for nearly *twenty* years in a practice, founded on an impracticable theory."

In the fifth American edition of "Principles of Human Physiology," by Dr. Wm. B. Carpenter, 1852, from page 282 to 297, are to be found some very interesting *facts* relative to the structure, development, source of vitality, and death of the teeth; and to those who are fond of scientific instruction in a very entertaining form, I would recommend a perusal of this valuable work. From it I shall make such quotations, in the exact language or sentiment, as shall serve my present purpose.

"The human teeth consist of three distinct substances; dentine, enamel and cementum." The dentine, which composes the larger part of the tooth, "consists of a firm substance, in which mineral matter largely predominates. It is traversed by a vast number of very fine branching, cylindrical, wavy tubuli, which commence at the pulp-cavity (on whose walls their openings may be seen), and radiate towards the surface. In their course outward, the tubuli occasionally divide dichotomously; and they frequently give off minute branches, which again send off smaller ones. These dentinal tubuli, on their arrival at the line of junction between the enamel and dentine, sometimes recurve and anastomose with contiguous tubes; sometimes pass for a short distance into the enamel; others pass into the interspaces that exist among the large granules that form the *outer surface* of the dentine; and some of them *may* even extend into the cementum and communicate with its radiating cells." Through these tubuli the proper nutriment of the tooth is carried, being absorbed from the pulp-cavity.

Thus we see that the proper vessels of the tooth commence at the pulp-cavity, and extend to the surface of the dentine; though M. Tomes has given us, as exceptions, cases where *some* of the tubuli have been

seen to extend into the cementum. Dr. Carpenter, in speaking of the vascularity of the cementum as found in some animals, says, "In man, however, in whose teeth the cementum is very thin, such vascular canals do not usually exist, though M. Tomes states that he has occasionally met with them." And he further says that "its presence (the cementum) in the simple teeth of man and the carnivora can be shown only by the application of the microscope." Thus we are shown that the cementum petrosa (or "periosteum") of the tooth possesses usually no vascularity, and consequently cannot be a *source* or even a *medium* of *vitality* to the tooth.

[To be concluded next week.]

MEDICAL TESTIMONY—DR. HEATON'S PAMPHLET ON THE HERNIA REPORT CONSIDERED IN THIS CONNECTION.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—A recent number of the Journal contained an article upon medical testimony, with allusions to the slight importance attached to the opinions of eminent physicians by juries, in cases in which disagreements occurred as to cause and effect, between physicians of the highest reputation and their less known and therefore less appreciated brethren.

Whatever has been said against juries, selected in the usual form for the trial of legal cases, as judges of medical facts, conclusions and inferences, will be said again by individuals who may have a theory disturbed by a particular verdict. Juries are usually composed of men possessing an average share of intelligence and "common sense"—and in scientific issues, are to rely upon the testimony of a class of expositors known to the law as experts. In medical science there is one step requisite to render pathological inquiry as satisfactory as the more demonstrable propositions of chemistry, mechanics, or engineering. The essential element in the process of analysis necessary to understand the merits of a disputed question, is separation of opinion from facts—in medical questions, a result sometimes with difficulty accomplished.

The appearance of a pamphlet, "Review of a Report of a Committee of the American Medical Association on the Permanent Cure of Reducible Hernia or Rupture, by George Heaton, M.D.," suggested to the writer a reference to the article alluded to in the beginning of this communication, at this time. It is not proposed either to consider the "Report of the Committee" or the "Review of the Report" in a critical sense, but only as the two may illustrate the question of medical testimony. A discussion upon the merits of the "hernia" question may be left to the parties interested more directly in the conflict of opinion and fact.

There have been cases tried in our State Courts lately, in which "medical opinion" has been divided, and the verdicts of the juries, so far as they may be considered as decisive upon the medical questions involved, have been given against the weight of authority, or "generally-received opinion"; and physicians have condemned the verdicts of these juries.

Now suppose an action is brought for mal-practice, in a case of operation for the cure of hernia. A medical witness is asked "whether or not there is any surgical operation at present known which can be relied on, with confidence, to produce in all instances, or even in a large proportion of cases, a radical cure of reducible hernia."

Many surgeons in Boston and elsewhere, would probably testify that there is not any such operation known. Three among the most distinguished of them would certainly so testify; for according to Dr. Heaton's pamphlet they have certified to this opinion, in "a report upon the subject of hernia to the American Medical Association."

We have, however, a contrary "opinion," certified by Dr. George Heaton, who, if he was upon the witness's stand in the case supposed, would testify—"that there is a surgical operation which can be relied on with confidence to produce a radical cure of hernia, not only in a large proportion of cases, but in all cases which one could reasonably expect to be cured." If questioned for reasons for his "opinion," he would reply by reference to "five hundred cases, or more, upon which he had performed this surgical operation, successfully," as he has stated in his pamphlet Review. Now if these five hundred "cases" are "cures," they are affirmative "FACTS"—demonstrating the proposition that there "is known" an operation for the cure of reducible hernia.

A medical writer observes, that "lists of cases, however certified, rather deceive than enlighten." When applied to hernia, however, the objection to "lists of cases" loses its force. The difference between an opinion and a fact is well defined by the same writer, in his objection to "lists of cases." He says, "when a man asserts that he has been cured of a particular disease by a certain drug, he is apt to think he is declaring a fact which he knows to be true; whereas this assertion includes two opinions, in both of which he may be completely mistaken." But a man generally knows if he have a hernia, and if cured by drug or operation can testify to the cure as a fact.

Now in the case supposed, would a jury subject themselves to just reproof, if in their verdict they should record the fact, that "there is known a surgical operation for the cure of reducible hernia," upon the evidence of the three surgeons on the one part, who certify that they do not know of any such operation, and Dr. Heaton on the other, who has performed the operation "five hundred times or more." Dr. Heaton has not described his operation. Perhaps its theory is against all surgical rule. This opinion is of no weight, certainly, against the published facts of his practice. The writer has never witnessed Dr. Heaton's manipulation for the cure of hernia; nor has he had opportunities for operating himself for the radical cure, as he could not promise "a cure" upon any self-relying basis, when applied to for that purpose.

The new principle, upon which is based "a mode of treatment and operation which closes effectually and permanently the various openings through which hernial protrusions take place," may yet be discovered by some surgeon, who to a knowledge of the disease and its anatomical relations, with opportunity for experiment, will add perseverance against difficulties, constant application, and liberal appreciation of scientific truth.

Dr. Heaton states his operation to be a simple one. He does not enlighten us upon it a step beyond the subcutaneous incision. We have, therefore, no means of inferring what is expected, as curative action at the objective point. The direction of the "delicate instrument adapted for the purpose," after it had penetrated the skin, would serve as a key to the destination and action of its point. If I am correctly informed, Dr. Heaton has no objection to operating in the presence of physicians who place patients under his care. I should be pleased to witness an operation, if invited to do so by him, and I frankly state the reason for the desire to do so.

I have an untried theory for a simple operation designed to "approximate the pillars of the abdominal ring," perhaps identical or similar to Dr. Heaton's plan. It was suggested by a case of accidental wound, in which case was a hernia; the healing of the wound and the cure of the hernia occurring at the same time, under my care, some years ago. No particular importance was attached to the case at the time, other than that the cure seemed against the rule. The divided parts were noticed, and a tardy union expected. The reverse was the fact; perfect union by adhesion was accomplished in about ten days, and no descent of bowel perceived afterwards. It may be superfluous to add, that I had no idea of a cure of the hernia from this wound. During the process of cure there were present none of the usual signs of inflammation.

Hitherto all the operations performed for the radical cure of hernia have been based upon inflammation or morbid action for producing adhesion and closure of the inguinal canal, in inguinal hernia. The means have been varied, but the end proposed has been the same. The failures are counted in large majorities, even when the cure has been attempted by the most skilful hands. Dr. Heaton's plan is not included in the list usually described in surgical works, as his *modus operandi* and theory are in company with the concealed "desideratum"; and whether adhesion in his cases is produced by inflammation or otherwise, can only be inferred by cures in the usual ways attempted in the experience of those conversant with surgical disease.

The structures divided by the accidental incision in the case referred to, under my observation, seem to have much to do with the closure of the dilated canal in hernia, and are to me suggestive of a theory of cure—particularly if these structures are operated upon by subcutaneous incision. Improving upon the hints contained in Dr. Heaton's history of his discovery, I shall make a trial of my conceived method upon the first case of reducible hernia that comes under my care, the patient being willing to take the chance of an untried operation; and I sincerely hope those surgeons in the midst of a large hospital practice, will, with the opportunities constantly occurring, endeavor to discover what the "simple operation" may be that has enabled Dr. Heaton to treat hernia so successfully.

The tendency to cure is proved by the frequent successful terminations under many modes of operation; although the principle in the individual cases does not appear to have been comprehended, and therefore fails upon general application. Your ob't serv't, J. S. Jones.

NECROSIS.

[Communicated for the Boston Medical and Surgical Journal.]

Few diseases entail more annoyance upon a country practitioner than disease and death of the osseous tissues. The apparently trifling nature of the lesion, at first a small granulating ulcer, seems hardly to justify the medical interference, which obstinacy alone in resisting all simple curative means, has summoned; and far from anticipating the serious prognosis, which one familiar with its aspect will unhesitatingly deliver, it is only expected that errors perhaps in its previous treatment will be alluded to, and some particular specific applied which will speedily terminate the trouble. Its nature truly defined, and an indefinite but protracted duration announced, incredulity questions the accuracy of your statement, and possibly looks for assistance from other quarters, where the views are more in consonance with the wishes and opinions of the interested party. I have generally found that the class of patients most subject to necrosis, are children who are predisposed, either by inheritance, or exposure to unfavorable influences, to scrofulous affections. The bones in such cases have been slow to take on the process of ossification, and a deficiency of the phosphate of lime has to a greater or less extent been present throughout the entire osseous system. This is usually attributable to an insufficient energy of the circulation, but seems to depend rather on a want of that nutritive principle in the blood, which evinces itself in the pale and wan complexions observable in children who are scantily clothed or subjected to the impure atmosphere of ill-ventilated apartments.

Jan. 12th, 1849.—A boy, about 14 years of age, with hereditary tendency to phthisis, had a slight pain and tumefaction over one of the metatarso-phalangeal joints, followed by ulceration. The probe detected the caries by that peculiar petrous feel which results from contact with dead bone. An incision through the cellular tissue gave exit to a few thin shells of bone, and the ulcer closed. The same occurred with one of the metatarsal bones of the same foot. While this last ulceration was in progress, a depression was noticed over the tibia midway between the epiphyses, which resulted in an extensive ulcer. It then became a question whether the caries could not be arrested at once by excision—whether, by a forcible separation of the sound from the unsound, the integrity of the bone could not be preserved; but I found, on consulting various authorities, that although a few cases had proved fortunate, yet in general, a repetition of the operation had been finally resorted to. Mr. Lawrie, of Glasgow, mentions two cases in which he was successful in thus anticipating the *sequestrum*; but his success does not seem to have been frequent enough to warrant a pursual of the practice. I concluded, therefore, to wait until the sequestrated portion was entirely enucleated; and although larger than the *cloaca* through which egress was to be obtained, determined to operate without an enlargement. Having procured a strong pair of curved forceps, with jaws notched for the purpose, they were introduced through the aperture; and seizing upon the detached bone, I succeeded in crushing it

in several fragments; and when thus completely disintegrated, a mucilaginous injection was thrown in, which upon flowing out, brought with it the bruised and minute portions of the sequestrum. By a succession of injections, the entire cavity was thus emptied. The aperture closed with but little delay, and the limb became as sound as its fellow.

Hanover, Mass., June, 1853. B. WHITWELL.

REMARKABLE CASE OF CATALEPSY.

[THE following case is related by Dr. L. C. Dolley, of Rochester, N. Y., in the Daily Democrat of that city. Although thus sent out in a daily newspaper, it has the appearance of being authentic, and on account of its remarkable character we copy it into the Journal—ED.]

Cornelius Vroomer, now aged about 37 years, a country laborer, and resident of Clarkson, Monroe Co., N. Y., of robust and vigorous frame, middle size, and 165 lbs. weight, about five years since (in June, 1848) made complaint of an obtuse pain in his head and epigastrium. This was sufficient to induce him to stop work, and ask medical advice. Dr. C., of Clarkson, saw him and prescribed little more than guaiacum and rhubarb, supposing the case one that would prove amenable to mild measures. The pain in the head and stomach continued for about two weeks, when consciousness, sensorial powers and volition became suspended. His respiration and circulation continued natural, while, without coma or spasm, muscular rigidity retained the body and limbs in the precise position they were when the attack came on. No apparent change occurred from this condition for several days, and with the exception of waking periods of from one to sixteen hours taking place at intervals of from one week to four months, he has remained in the same condition to this date.

His conscious periods for the first few months occurred at intervals seldom exceeding two weeks—latterly seldom less than four, and sometimes not less than eight or ten weeks. His most lengthy period of unconsciousness has been four months; longest waking interval sixteen hours. In the great length of the periods of unconsciousness and motionless rigidity, the case is unique and particularly interesting. During the whole of these periods there has been the most complete anæsthesia. Powerful excitants have been applied to the surface at various times, such as blisters over the head and spine, and at one time, accidentally, sufficient heat to his limbs to vesicate extensively, without causing any manifestation of pain. The nervous system, it would appear, is but slightly influenced by all external impressions. None but the slightest motion of the limbs are induced by currents of magnetic electricity, and under repeated applications of cold water, including a plunge into Lake Ontario, he seemed to experience no impression, excepting at one time under a long-continued douche from a height, he moved himself from his position, but did not manifest a full return of sense.

The involuntary functions of his system are performed with much regularity, but with less force and activity than in health. Pulse and

respiration regular but faint. Evacuation from his bowels occurs once in from six to nine days—passes his urine more frequently. These calls of nature are made manifest to his attendants by a slight uneasiness of his body, and are kept in abeyance until necessary preparations are made. From this feature of the case, and the fact that when conscious he has once or twice evinced a knowledge of events which transpired during his cataleptic state, and that he possesses the power of balancing himself when placed erect upon his feet, it is apparent to the physiologist that everything but the spinal and ganglionic system is not asleep, that the senses are partly awake, and of a somnambulic character. I am informed by his attendants that there are times when his system seems more completely under the influence of natural sleep than at others; this soporose state is indicated by snoring, and is not attended with the least relaxation of the muscular rigidity. Food is usually administered to him twice a-day, and only by prying the jaws asunder and forcibly introducing it into his mouth and fauces.

His conscious periods return suddenly and at irregular intervals. During these short waking periods he walks erect, shows no very manifest diminution of strength or natural mobility, greets his old acquaintances, converses freely, and supplies liberally the demands of his stomach. On one occasion, not many weeks since, it is said he walked to the beach of the Lake, a distance of half a mile, and treated himself and friends to a supply of such grocery luxuries as dried herring and crackers.

Nothing is known of his habits previous to the invasion of this disease, to which it can be referred. It is known that he "imbibed" only occasionally, and was a tobacco-chewer, and it is worthy of note that the last-named habit is completely reformed, as he has not expressed a desire for the weed for four years. During the colder months the temperature of his surface is considerably diminished, and at times his extremities are quite cold. When the surrounding atmosphere is comfortably warm, the temperature varies but little, if any, from the healthy standard.

As seen at this time his cast of features is calm and complacent, and presents nothing particularly unpleasing, except the protrusion of his lips. The firm pressure of his jaws has forced the incisor teeth to a very acute angle in front, and almost forced them from their sockets. The projection of the teeth and the approximation of the maxillæ have forced his teeth to a prominence quite equal to his nose. The external surface of the upper lip lies in close proximity with the nostrils.

Tonic spasm, of not the greatest rigidity, exists throughout his muscular system. His head is brought downward and forward towards the sternum; the body is curved foward, the spine forming the arc of a circle, as in emprosthotonos. The forearms cross the abdomen; the wrist joints and those of the fingers are the most firmly fixed. The thighs and knees are but slightly flexed, and are firmly fixed at obtuse angles. When placed upon his feet or seated in a chair, he has the power of sustaining himself in an erect posture as rigid as a statue, from which position he has to be removed mechanically by his attendants. At one time

he was placed upright upon his feet, and suffered to remain in his motionless position for three days and nights.

It is unnecessary to specify the various measures which have been adopted by a number of the sons of Æsculapius for his restoration. Their "science and skill," thus far, have seemed to avail nothing in this case. His friends say they have restored consciousness on one or two occasions by administering very copious draughts of whiskey. Nitrous oxide, long-continued cold to the head and spine, and chloroform, are measures which have not been tested.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 22, 1853.

More Alligator Experiments.—We perceive, by the New Orleans Delta, that Drs. Cartwright and Dowler have been engaged in additional experiments on the American crocodile. Three of these animals were secured in the court-yard of Dr. Cartwright; one was operated on by Dr. Dowler, and the other two by Dr. Cartwright. The experiments on the former go to show the possession of a *diffused* sensibility—a local capacity to recognize pain, after the division of the spinal marrow and also of the nerves emerging from it. Dr. Cartwright's experiments, as our readers will surmise, were connected with the motive power of the circulation—and the results were similar to those of former experiments already recorded in this Journal. In addition to the tying of the windpipe in both animals, one of them had the chest opened, and the heart, lungs and stomach exposed; yet after two hours time, both being proved to be dead by exposure over flames of fire, resuscitation was brought about by artificial respiration. In Dr. Dowler's subject, which was bloodless, the inflation failed.

Eccentricities of Medical Men—The Pentateuch in Rhyme.—No profession or trade is without its anomalous characters. Indeed, it is impossible that all minds should be alike. The intellectual world would be dull and monotonous were there no varieties of mental tastes and capacities. Hunkers in thought are as objectionable as those in politics. Neither would allow any progress, if they could prevent it. Contented in their own circumscribed sphere of action, so long as they can hold the first position, and keep others down—a whisper, a suggestion, and, above all, the act of teaching any thing new, calls forth the strongest energies of their nature in opposition. Some of the abnormal sentiments, and especially the whims and eccentricities, of physicians, constitute agreeable episodes in professional life, when they do not interfere with the rights, privileges or happiness of others. Oddity is often connected, too, with great genius. Queer trains of thought, and a disposition always dominant to do and say things differently from other people, make a marked man. In the course of an extensive editorial intercourse with members of the medical profession, in this and other countries, we have been in contact with some very extraordinary persons. Without particularizing, it is sufficient to state the fact that propositions for a multitude of schemes have, over and

over again, been submitted to us for consideration, many of which, were they made known, would create a universal shout of laughter; while half of the remainder would seem to show that their authors were stark mad! Some of these are remotely related to medicine, and some not at all. Still, their publication is not unfrequently urged with a pertinacity hardly to be resisted, as the author of each sees clearly—more so than any one else—the vast revolution it is calculated to produce, and always for the best interest of mankind! But were such writers often indulged, spectators would have exclaimed, long ago, in the words of a commentator in the Salmagundi,

"For physic and farces,
Their equal there scarce is;—
Their farces are physic,
Their physic a farce is."

These reflections have grown out of the circumstance of a novelty in literature having recently come under our notice. One of the medical brotherhood has left with us a written paraphrase of the whole Pentateuch, and also other portions of the Bible, actually turned into verse! Simply considered as a labor—to have written so much with one's own hand, indicates immense industry; but when to this is superadded the mental activity necessary to put the books of Genesis, Exodus, Leviticus, Numbers, Deuteronomy, &c., into rhyme, and preserve harmony of measure, the work may be considered as no every-day effort. On the whole, it is the rarest specimen of medico-literary eccentricity within the compass of our recollection. Here is a specimen of the versification.

"A woman having borne a son,
Observ'd seven days separation;
On the eighth after 'twas born,
The boy was of his foreskin shorn."

See how the author relates what happened to Pharaoh for his obstinacy—

"Now came a judgment dire, of frogs,
From rivers, meadows, pools and bogs,
And every house, from oven to the bed,
Was filled with croakers, live or dead."

Naturalists have never determined what kind of marine monster swallowed Jonah; but our author has settled the question without hesitation—

"Oppressed with fear, the prophet roar'd,
'Throw me over—overboard.'—
The foam concealed him from the sail,
As came along a mighty whale,
That swallowed all within his reach
Just as we should suck a peach,
And down went Jonah, neck and haunch,
Into the monster's awful paunch."

But we have not room, even if this were the place, for more extracts from this unique performance.

Stricture of the Urethra—Treatment.—In April last, Paul F. Eve, M.D., of the chair of surgery at the University of Nashville, Tenn., read a paper upon stricture of the urethra, and the rapid and free dilatation of the urethral canal. Dr. Eve's reputation commands confidence, and we are of the opinion that his teachings on this subject are entitled to high consideration. A pamphlet is abroad, which might be ordered by mail from the publisher, J. T. S. Hall, Nashville, that furnishes more reasons for the course of treatment he recommends, than could be transferred to our pages without trespassing on a copy right. Besides furnishing the

most recent practice of eminent French surgeons, he gives his own sound views, accompanied by illustrative cases. At the conclusion, there are some propositions that may safely be regarded as rules of practice, two of which are as follows:—"To cure stricture, the orifice of the urethra must be so enlarged that the *canal beyond* it may be dilated *to its original size*, which we ought to recollect is about twice that of the opening leading to it. Instead, therefore, of being satisfied with introducing bougies, of two lines in diameter, through a restricted portion, they should measure four or five lines in thickness." "There is no necessity to confine a patient in bed, in treating stricture; when an instrument has been once introduced, it has done all it can to expand the passage, and should be withdrawn," says Dr. Eve, that others, larger in size, may be immediately substituted. "While this process ought to be cautiously and very gradually conducted, the more rapidly and freely it can be applied, provided no pain is excited, the sooner the disease will be removed."

Busts of Medical Men.—Within a few weeks, a very beautifully-executed marble bust of the venerable John Green, M.D., of the city of Worcester, Mass., has been placed temporarily in the Boston Athenæum. The expression of the man has been so accurately transferred to the marble, as to create an interest in the artist, Mr. B. H. Kinny, who is destined to a permanent place among the native geniuses of the United States. The power of thus giving vitality to stone is a divine gift: it cannot be taught, or learned; and whenever and wherever it is manifested, such a rare endowment should be liberally encouraged by the community. Civilization is as much advanced by the cultivation of the fine arts, as by the multiplication of elementary schools of learning. Where there is no public taste leading to the patronage of painting and sculpture, the higher sentiments are imperfectly developed, and the beautiful in nature is not appreciated. If some half a dozen New England fathers in medicine would leave to the scientific institutions of the State, a similar memorial of their existence, they would not only be gladly received, but the fine arts would be encouraged, and the community benefited.

The late Dr. Truman Abell.—Among the necrological notices in the Journal a few weeks since, was that of Truman Abell, M.D., late of Lempster, N. H. Dr. A. was an eminent practitioner, and his industrious, well-spent life, secured for him the respect of a large circle of friends. Besides fulfilling all the duties of an active country physician, he cultivated the highest departments of science, and especially that of astronomy. He saw in the firmament a vast field for contemplation, and an inexhaustible source of instruction. The more he studied the exhibitions of divine agency in the heavens, the greater was the moral influence he exerted in the community. For thirty-nine successive years, Dr. Abell conducted the New England Farmer's Almanac. The calendar pages of that useful, extensively-circulated, but unobtrusive work, bear unfading evidence of his capacity, accuracy and powers of expression in a difficult branch of knowledge. He was accurate in whatever he undertook, mastering every subject, with equal facility, to which he gave the full force of his ever active mind. In botany he had few if any competitors at the North. At the advanced age of 74 his labors upon earth were completed, and the good man entered upon another and higher state of existence. An inter-

esting account of a very remarkable state of illusive vision, experienced in his own person, was communicated by Dr. A. for this Journal, and may be found in Nos. 21 of vol. xxxiii., and 3 of vol. xxxiv.

Concentrated Medical Agents.—Messrs. Keith & Hendrickson, of New York, have embarked largely in the manufacture of medicinal preparations in a concentrated form. To obtain the active medicinal properties of indigenous and foreign plants is the object contemplated by these gentlemen. There is not an article received into the materia medica, belonging to the vegetable kingdom, from which they cannot extract its essential virtues. Their laboratory is known as the American Chemical Institute. It is not our province to determine whether medicines should be precisely as nature prepared them, either in bark or roots. An immense amount of useless, if not injurious, material may be, and in fact is, absolutely taken into the stomach as the supposed necessary accompaniment of the particular thing which the physician prescribes. The separation of whatever is foreign to the purpose, and simply taking the unmixed, detached medicinal agent, would seem to be an improvement. There are those, however, who object to this process. But they might, it appears to us, with an equal show of reason insist upon eating the shells with the oyster. Certainly there is room for inquiry on this point. Leaving others to decide who is right and who is wrong, it is quite certain that very delicate doses of some of the offensive but excellent remedies are prepared at the establishment alluded to. For example, two grains of jalapine answers all the purposes of a dose of ten or fifteen grains of the pulverized root. An apothecary shop is thus put up in miniature, so that a country practitioner may carry, in one pocket, all the principal medicines used in a mixed business. A full case, as thus prepared for the profession, strongly resembles a homœopathic pocket-book of petit phials. But there is an obvious difference between a trillionth part of a grain of a cathartic drug, in a hogshead of water, a teaspoonful of which is taken once in forty-eight hours, and two grains of an extract, containing the active properties of fifty or a hundred grains. It would be both gratifying and useful to have this matter debated, and the facts brought forward for and against the concentrated drugs. In the mean while, it is represented that the demand upon the manufacturers indicates a preference among the profession for much in a little space. A concise description of each medicine, and the precise dose, in this new form, should go with every package. Some terrible mistakes will assuredly follow, and bring the system into disrepute, if care is not taken, seasonably, to instruct those who have necessarily to learn how to prescribe them.

Taylor's Medical Jurisprudence.—Having examined a copy of the third American, from the fourth London, edition of this book, just from the press of Messrs. Blanchard & Lea, Philadelphia, we feel called upon unhesitatingly to express our confidence in it, as a work of the highest order, and quite indispensable to gentlemen who desire to keep up with the progress that is every day being made in medical jurisprudence. No member of the bar, who pretends to be qualified for conducting an intricate trial, in which the principles of medical science are involved, could very well dispense with it, without depriving himself of an important legal assistant. Edward Hartshorne, M.D., of Philadelphia, has appended to the original a synopsis of some of the State laws, which gives additional value

to the volume as a book of reference in criminal law in this country. On a former occasion, the peculiar claims of Dr. Taylor's labors were stated; by simply apprising medical readers, therefore, that in this edition nothing has been taken away from it, but that much that is excellent has been added, further comment is not needed. The book is a large octavo of 621 pages, closely printed, with a fair type, and on good paper.

Registration Laws.—An able paper, by Franklin Tuthill, M.D., which originally appeared in the Transactions of the Medical Society of the State of New York, is published in a separate pamphlet for circulation. It seems that repeated efforts have been made in the Legislature of that State to repeal the act providing for the registry of births, deaths, and marriages, which induced Dr. Tuthill to review the objections brought against it. As a historical document, it is eminently worthy of preservation, because it furnishes a good account of the origin of registration laws in ancient times; and in the next place, it sets forth, both eloquently and cogently, the true reasons why there should be a carefully kept record of three important events in civil life, viz., the birth, marriage and death of every individual. From the skilful manner in which Dr. Tuthill has conducted the argument, and the energy displayed on every page of the discourse, we trust that those who have the honor of the Empire State in their keeping, as legislators, will peruse it carefully, and never lose sight of the great benefits to be derived from a strict system of registration.

School of Practical Pharmacy.—In the autumn of 1849, a school of pharmacy had its origin in Philadelphia, that is still conducted vigorously and advantageously for students. Lectures commence for an autumnal course, in September. A published list of each class for years indicates the prosperity of the institution. The present catalogue gives the names of 154 attending the last course. Whether it is an enterprise of only one man, or of an association of physicians and druggists, is not stated. On the cover we read—"Announcement of Edward Parrish's School of Medical Pharmacy for Medical Students."

Dr. M. R. Woodbury, of Concord, N. H., has been appointed surgeon of the U. S. Marine Hospital at Eastport, Me.

To CORRESPONDENTS.—Dr. Cartwright's account of the Experiments in New Orleans, alluded to on another page, has been received, and will appear next week.

MARRIED,—James Stewart, M.D., of Malden, Mass., to Miss S. J. French.—Dr. A. H. Flanders, of Newburyport, Mass., to Miss B. Fields.

DIED,—At South Royalton, Vt., Dr. Byron A. Manchester, 24.—At Edgecomb, Me., Dr. John Boutelle, 79.—At New Haven, Ct., James M. Thacher, M.D., of Philadelphia, 30.—In New York, Dr. Peter G. Douglass, late of Boston, 71.

Deaths in Boston for the week ending Saturday noon, June 18th, 55. Males, 30—females, 25. Accidents, 2—congestion of brain, 3—consumption, 12—convulsions, 1—croup, 3—cancer, 1—dysentery, 1—dropsy in head, 2—infantile diseases, 3—erysipelas, 2—scarlet fever, 4—typhoid fever, 1—fracture of skull, 1—hemorrhage, 1—disease of heart, 1—inflammation of the lungs, 3—disease of the liver, 1—marasmus, 3—measles, 2—palsy, 2—disease of the spine, 1—suicide, 1—teething, 2—unknown, 2.

Under 5 years, 19—between 5 and 20 years, 8—between 20 and 40 years, 8—between 40 and 60 years, 14—over 60 years, 6. Born in the United States, 38—Ireland, 13—England, 1—Scotland, 1—Germany, 2. The above includes 3 deaths in the city institutions.

Hydropathy in California.—By the following report of a Committee of the House of Representatives in California, it will be perceived that the Chairman was a sensible man, and also that hydropathy is bold in its pretensions there as well as here. There is a vein of wit running through it, which gives it a zest, and the whole tone of it very clearly shows that old birds are not to be caught with chaff. It is taken from the Alta Californian.

"The Committee on State Hospitals, to whom was referred a remonstrance by G. M. Bourne, hydriatic physician of San Francisco, would beg leave respectfully to report,

"That they have carefully weighed the propositions contained in said remonstrance, and found them wanting, as follows:

"1st, Because it assumes that a man has a right to place himself before the public as a practitioner of a science, of the principles of which he is entirely ignorant. He says he is in possession of no other warrant for practising the healing art than that conferred upon him by the great source of his being, or in other words, he was born with a sheep's skin, *ergo* he has, without preparation, the natural right to practise medicine and surgery. Your Committee believe in no such logic.

"2d, In the opinion of your Committee, it is not inimical to the spirit of our free institutions that the flights of erratic genius should be restrained within proper limits. The laws of every State protect its citizens from frauds practised upon them by false pretenders. If, then, the protection of property is deemed so essential, how much more carefully should health and life be protected from the impositions of ignorant pretenders and charlatans.

"3d, That the medical profession has not realized the world's expectation, is lamentably true; but that it has approached any nearer so desirable a consummation since the advent of Priessnitz and hydropathy, your Committee has not been advised.

"The order of Pretender, with whom your remonstrant fraternizes, has no legal existence, and, as your Committee believe, should have none.

"The assertion of your remonstrant, that an immense number of astonishing and miraculous cures have been effected by means of cold water, requires confirmation; and your Committee, all of whom are medical practitioners, cannot conceive in what manner it has been made subservient to the successful management of difficult cases of parturition, and require the testimony of more than one interested witness to establish the fact. Your Committee have searched all the records within their reach, and can find no such statistics, but if, as your remonstrant asserts, a man totally ignorant of medicine and surgery did accomplish so much good, another man equally ignorant might accomplish as much evil.

"Your Committee believe that no system of medicine should receive the protection of the laws of the State, to the exclusion of others. At the same they believe that every practitioner, whether of allopathy, homœopathy, hydropathy, eclectic, botanic, uriscopic, root, herb, Indian or corn doctor, should possess some evidence of his proficiency in such science, other than the ear-marks with which he was born. Your Committee are not aware that any legislative enactments are in contemplation which will have the effect of retarding the progress of medical knowledge, as your remonstrant asserts.

"Those fathers of medicine whom your remonstrant has had the temerity to press into the service of hydropathy, never dreamed of the employment of water as a curative agent, to the exclusion of all other remedies, the advent of Priessnitz having been many centuries subsequent to this time.

"'Literary celebrities' are not, in the opinion of your Committee, the proper persons to decide upon the merits of any system of medicine.

"Sir John Ross and other navigators have recorded their opinion of water, no doubt verifying it as absolutely necessary to the success of navigation.

"*Lie-bigs* experiment of the chemical effects of cold water upon the animal economy, your Committee have not seen; but they can readily conceive, as your remonstrant asserts, that great changes (if not entire dissolution) of the human body would occur under six weeks of active water treatment.

"Notwithstanding 'the great fiscal embarrassment of the State,' your Committee believe it would be more than folly to substitute simple cold water for medicines of known and of proven utility, and discharge from our State Hospitals men of tried ability, and substitute a natural-born doctor on account of cheapness. Your Committee have heard of men who were born kings, and of others who were born fools, but no well attested case of a *born* doctor.

"Your Committee would recognize the right of a female to practise medicine and surgery, if her education qualified her to perform its arduous duties. Her nature peculiarly fits her for ministering to the wants of the sick and afflicted.

"In conclusion, your Committee would recommend that a copy of this report, together with a copy of your remonstrant's manifest, be transmitted to that 'bourne' from whose 'home for the sick' no patient will be likely ever to return, and ask to be discharged from a further consideration of the subject. J. H. Estep, *Chairman.*"

Abortive Treatment of Typhoid Fever.—Dr. Fenner, of New Orleans, at a late meeting of the Physico-Medical Society of that city, referred to several cases of Typhoid fever, which he had lately under his care in the Charity Hospital; and in which, he had employed the abortive treatment of quinine, given in large doses along with a portion of opium, and with the same advantageous results, as in the cases which he had previously reported to the Society, where the same mode of treatment had been followed. The abortive treatment, in all the cases which were submitted to it three days after the attack, did well. Others again, that came in in all stages of the disease, and on whom the same treatment was tried, did not do so well.